



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

made at the Magnetic Observatory, of the number of meteors or "shooting stars," for three hours on the mornings of the 12th, 14th and 15th of November. The morning of the 13th was cloudy. The eyes of the observer were directed to the zenith and northward. The results are contained in the following table.

TIME.		APPARENT MOTION OF METEORS.				
		DOWNWARD.			UPWARD.	
Day.	Hour.	Eastward.	Westward.	North.	Eastward.	Westward.
Nov. 12th.	12 to 1 A. M.	4	1	2		
	1 to 2	4	8	1		1
	2 to 3	4	4			1
14th.	12 to 1 A. M.	3	4	1		
	1 to 2	5	7	1	1	2
	2 to 3	7	10			
15th.	12½ to 1 A.M.	4				
	1 to 2	6	4			
	2 to 3	3			1	

The greatest number observed in any one hour was 17, the least 4; the average number per hour during the three hours on the 12th, was 10; on the 14th, 14; and on the 15th, 7.

Stated Meeting, December 2.

Present, twenty-five members.

Mr. Du Ponceau, President, in the Chair.

The following donations were announced:—

FOR THE LIBRARY.

A Catalogue of the Officers and Students of Dartmouth College, for the Academical Year 1842-3. 8vo. Concord, 1842.—*From the College.*

Journal of the Franklin Institute of the State of Pennsylvania. Third Series. Vol. IV. No. 5. Philadelphia, 1842.—*From Dr. Paterson.*

FOR THE CABINET.

An Inkstand of a new construction, invented by Mr. George Barnam.—*From the Inventor, by the hands of Mr. Baldwin.*

Mr. Lea mentioned that, by some inadvertence, he had used, in his papers read before the Society, several specific terms which were preoccupied. He proposed to change on that account

<i>Melania rufa</i>	to	<i>Melania rufescens.</i>
<i>M. striata</i>	to	<i>M. striatula.</i>
<i>M. lævigata</i>	to	<i>M. lævis.</i>
<i>M. corrugata</i>	to	<i>M. rugosa.</i>

Mr. Lea also mentioned, that he proposed the provisional name of *pressus* for a *Unio* which he called *compressus* in a paper read before the Society, until it should be ascertained whether or not the shell from the Tilgate beds (secondary formation in England,) called by Mr. Sowerby, *Unio compressus*, should prove to be a true *Unio*, of which he had great doubt.

Professor Bache communicated, orally, a description of a new induction inclinometer, by Professor Lloyd, of Dublin, and suggested a modification, by which the same instrument might be used to measure changes of declination and inclination.

In this new instrument of Professor Lloyd, the magnetism developed by the earth in a soft iron bar, placed vertically, is made to act upon a magnetic bar suspended in a horizontal position; the changes of inclination being deduced from the changes in the position of the horizontal bar. The modification proposed by Prof. Bache would, he conceived, be useful, when it was desirable to economize in the outlay for instruments, and when the director or a skilful assistant was the observer. Two pieces of soft iron are so placed on the opposite sides of the horizontal magnetic bar as not to change its position, one of them occupying the place of the vertical bar of soft iron in Professor Lloyd's instrument. By an obvious mechanical arrangement, the position of one of the pieces of soft iron is changed in a vertical line; so that a pole of different name comes into the horizontal plane of the axis of the suspended magnet, which is now deflected

by the sum of the forces developed by the earth's magnetism in the two vertical bars.

The practical question was whether the horizontal bar could be brought to rest, or nearly so, in time to observe its new position; the copper rectangles used in the declination instrument being obviously inadequate to produce this effect. Prof. B. stated that his first assistant and himself had both found this result practicable, even with the short intervals of term-day observations. This was effected by a change in the position of the movable vertical bar producing half the amount of deflection;—by allowing the horizontal magnet to make one excursion in the direction of the impressed force, and when in motion for the return, checking it by completing the change of position of the vertical bar.

Prof. Bache further proposed the use of tubes of sheet iron for the temporary magnets, as they can be more readily annealed, and all permanent magnetism may thus be more easily destroyed in them, than in bars.

The Treasurer presented the annual report of the state of the funds of the Society, which was referred to the Committee of Finance.

Mr. Lea, chairman of the Publication Committee, presented the annual report in relation to the Society's Transactions.

The number of subscribers to the Transactions is 107. The number of copies distributed in exchange with other Societies, &c., is 71, and the number sold to non-subscribers since the last annual report, has been 10. The balance of funds in the hands of the Committee is \$283.32.

Stated Meeting, December 16.

Present, thirty-two members.

Dr. BACHE in the Chair.

Letters were read:—

From the Academy of Sciences of Paris, dated 5th August, 1842,—the Royal Academy of Turin, dated 28th Oct. 1842,—the Society of Antiquaries of London, dated 18th Nov. 1842,—the Auxiliary Society of National Industry of Rio Janeiro,